

#### ABSTRACT OF THE DISCLOSURE

A tire deflation warning system is based solely on the measured distance traveled by each tire of a vehicle. The vehicle is equipped with a sensor which generates pulses representative of the distance traveled by each wheel such as generated by an ABS brake system. The system accumulates the pulses in the controller to determine whether the vehicle is stable. If the vehicle is stable, it performs a test to cover individual tires, opposing diagonal tires or any combination of three tires using an average of the diagonal ratio. These tests are performed by utilizing the pulses generated by each wheel representing the distance traveled by the wheel.